Periodical Maintenance Chart

	Item	First month	Every month	Every 3 months	Every 6 months	Every 1 year	Note
1	Motor				I		
2	Motor Controller				I		
5	Battery	I	I				
6	Charger	I	I				
7	DC to DC Converter	I	I				
8	Tire	I	I				
9	Tire Pressure	I	I				
10	Brake Clearance	I	I	A			
11	Light / Electrical System / Meter	I	I				
12	Electric Throttle Operation			I			
13	Steering Handlebar				I		
14	Bolt / Screw / Nut Tightness	I	I				
15	Main Stand / Spring				I		
16	Suspension / Oil Leakage			I			
17	Frame Parts Lubrication				L		
18	Transmission Belt					I	
19	Transmission Oil	R	Replace every 4 months or 2000km				

I-Inspection **A**-Adjustment **R**-Replace **C**-Clean **L**-Lubrication

Maintenance Record

	1st month	2nd month	3rd month	4th month	5th month	6th month
Kilometer	km	km	km	km	km	km
Date	/ /	/ /	/ /	/ /	/ /	/ /
Distributor						

	7th month	8th month	9th month	10th month	11th month	12th month
Kilometer	km	km	km	km	km	km
Date	/ /	/ /	/ /	/ /	/ /	/ /
Distributor						

	13th month	14th month	15th month	16th month	17th month	18th month
Kilometer	km	km	km	km	km	km
Date	/ /	/ /	/ /	/ /	/ /	/ /
Distributor						

	19th month	20th month	21st month	22nd month	23rd month	24th month
Kilometer	km	km	km	km	km	km
Date	/ /	/ /	/ /	/ /	/ /	/ /
Distributor						

	25th month	26th month	27th month	28th month	29th month	30th month
Kilometer	km	km	km	km	km	km
Date	/ /	/ /	/ /	/ /	/ /	/ /
Distributor						

	31st month	32nd month	33rd month	34th month	35th month	36th month
Kilometer	km	km	km	km	km	km
Date	/ /	/ /	/ /	/ /	/ /	/ /
Distributor						

	37th month	38th month	39th month	40th month	41st month	42nd month
Kilometer	km	km	km	km	km	km
Date	/ /	/ /	/ /	/ /	/ /	/ /
Distributor						

	43rd month	44th month	45th month	46th month	47th month	48th month
Kilometer	km	km	km	km	km	km
Date	/ /	/ /	/ /	/ /	/ /	/ /
Distributor						

Note:1. Bring this maintenance record while maintaining and repairing your scooter.

2. Expendable replacement items and abnormal usage are not applicable to the warranty. Please read the warranty procedure.
3. Please carry out maintenance in accordance with the Maintenance Record.
4. Whlie running out of the Maintenance Record, please copy and add it to the original.

This manual describes the correct usage of this vehicle including safe riding, simple inspection methods and so on.

For a more comfortable and safer riding, please read this manual carefully.

For your benefit, please ask your SYM dealer the operating manual and read the following：
- Correct usage of the vehicle.
- Pre-delivery inspection and maintenance.
- Usage of warranty, warrant contents, and warranty period.

In case the vehicle's specifications and construction are modified and different from the photos and diagrams on the owner's manual / catalogues, the specifications and construction of the actual vehicle shall prevail.

◎Safety Suggestion◎

We concern the safety of both you and your scooter, thus, in this manual we provide safety suggestions of the scooter usage. Please read carefully and follow the safety suggestions. These safety suggestions indicate some potential dangers which may cause injury; each safety suggestion has specific warning mark, symbol, or notation illustrated below:

⚠Warning

Disobeying of this mark may lead to serious injury or even death.

⚠Caution

Disobeying of this mark may lead to hurt or even serious injury.

⚠Attention

Disobeying of this mark may lead to hurt.

◎Every safety suggestion has notation telling you what danger may happen and how to avoid or reduce the risk.

◎In addition to the three safety suggestions mentioned before, there is also another important mark in this manual—Note ; disobeying this mark may result malfunction of your scooter.

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3. Warranty Method 3
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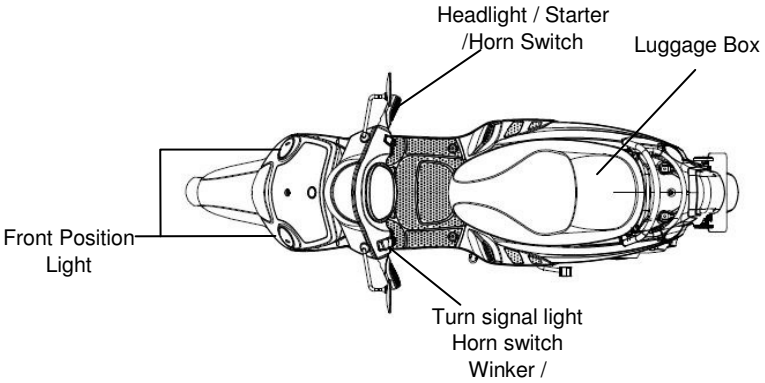
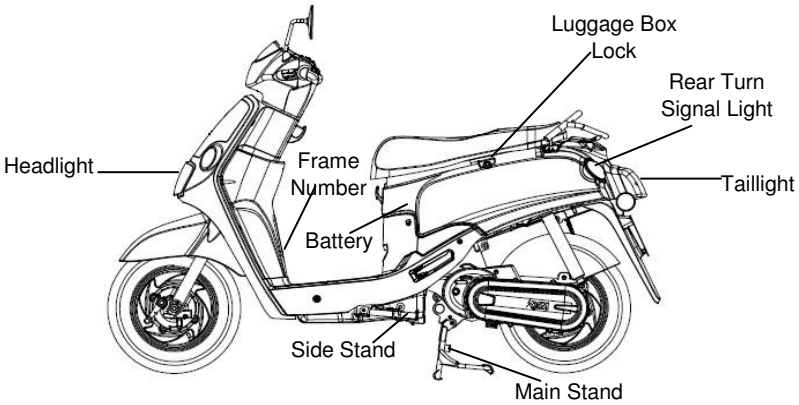
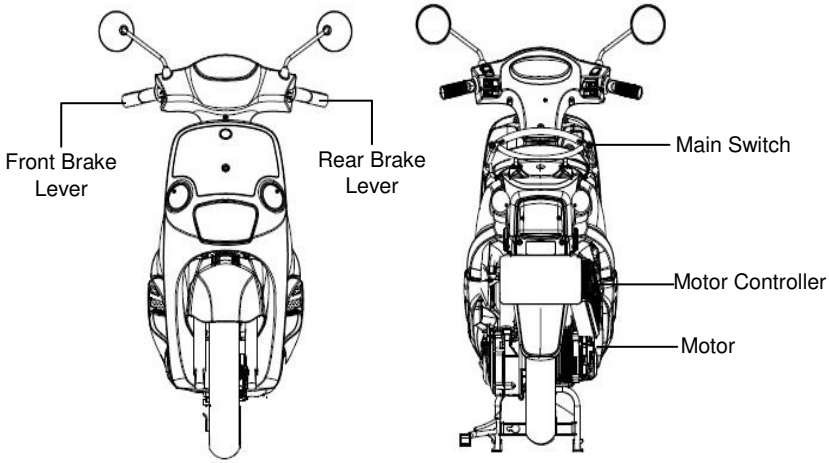

Headlight / Starter
/Horn Switch
Luggage Box
Front Position
Light
Turn signal light
Horn switch
Winker /


Luggage Box
Lock
Rear Turn
Signal Light
Headlight
Frame
Number
Taillight
Battery
Side Stand
Main Stand


Front Brake
Lever
Rear Brake
Lever
Main Switch
Motor Controller
Motor

This manual describes the correct usage of this vehicle including safe riding, simple inspection methods and so on.
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- Correct usage of the vehicle.
- Pre-delivery inspection and maintenance.

In case the vehicle's specifications and construction are modified and different from the photos and diagrams on the owner's manual / catalogues, the specifications and construction of the actual vehicle shall prevail.

SAFE RIDING

It is very important to be relaxed and wear properly while riding, observe traffic regulations, do not rush, always ride carefully and relaxed.
Usually, most people would ride their newly bought vehicle very carefully, but after they become familiar with their vehicle, they tend to become reckless which may result in an accident.

To remind you：
- Please wear a helmet, and properly tighten the helmet belt when riding.
- Clothes with open or loose cuffs may be blown by wind and cause the cuffs caught on the steering handlebar and thus affects riding safety. So put on clothes with tight sleeves.
- Hold the steering handlebar by both hands when riding. Never ride with only one hand.
- Observe the speed limit.
- Wear suitable low-heel shoes.

Perform periodical maintenance and inspection in accordance with the schedule.

⚠ CAUTION：
- Modified vehicle will affect its structure or performance, and cause poor engine operation or exhaust noise, which will result in shorter vehicle service life.
  Besides, modification is illegal and does not conform to the original design and specifications.
  A modified vehicle will not be covered by warranty. Therefore, do not modify your vehicle at will.
- Tire and rim modifications will make it unsafe to ride and may cause severe injury or death.

Keep your body such as shoulders, arms, palms, and waist relaxed and ride with the most comfortable posture in order to react quickly when necessary.

- Riding posture will greatly affect riding safety. Always keep your body's gravity in the center of the seat. If your body's gravity is on the rear part of seat, the front wheel load will be reduced, and this will cause the steering handlebar shaking. It is dangerous to ride a vehicle with an unstable handlebar.
- It will be much easier to make a turn when the rider inclines his body inward. On the contrary, the rider will feel unstable if his body and the vehicle do not incline when making a turn.
- The vehicle is hard to control on a bumpy, unleveled, unpaved road. Try to know the road conditions in advance, slow down and use your shoulder's force to control the handlebar.
- Suggestion: Do not load unnecessary objects on the front floor panel; avoid affecting the riding safety and the operation of steering handlebar.

⚠ CAUTION：

The rider's feeling on the handlebar is slightly different with or without a load.
Overload may cause the handlebar to swing and affect the riding safety.
Therefore, do not overload your vehicle.

- Overload will cause the vehicle become unstable and hard to control, it may cause serious damage to the tires and rims; it may also change the center of gravity, which could result in an accident that could cause injury or death. Do not exceed the maximum authorized load.

USE GENUINE SPARE PARTS

To maintain the vehicle's best performance, each part's quality, material, and machined precision must conform to the design requirements.

"SYM Genuine Spare Parts" are made from the same high quality materials used for the original vehicle.

No parts would be sold to the market until they could meet the designed specifications through sophisticated engineering and stringent quality control.

Therefore, it is necessary to purchase **"SYM Genuine Spare Parts"** from **"SYM Authorized Dealers or Franchised Dealers"** when replacing spare parts.

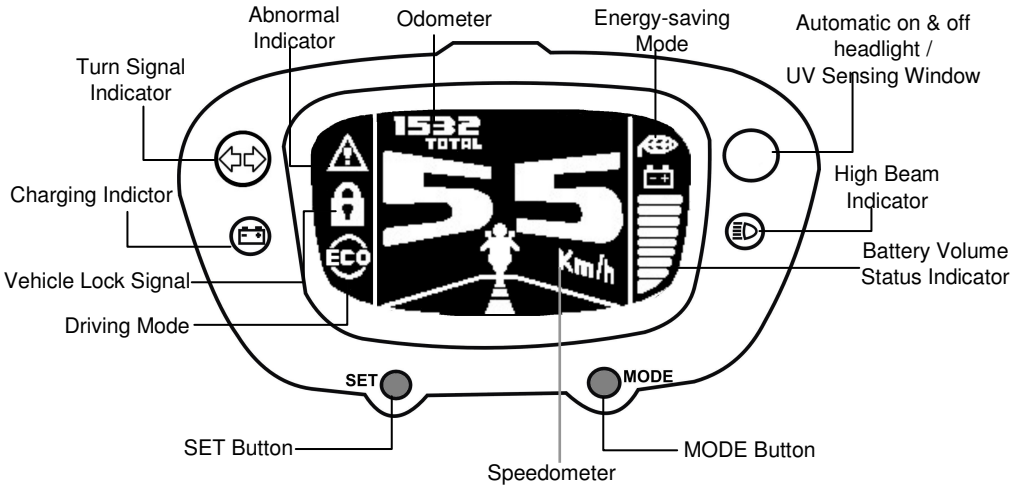
If you buy the cheap or fake substitute parts from the market, neither quality nor durability will be guaranteed.

Also, it may result in unexpected troubles and reduce the vehicle's performance.

- Always use **SYM Genuine Spare Parts** to ensure its long service life.

Basic Controls of SYM e-Virid

GAUGES



Speedometer

- This shows the speed in kilometers per hour (km/h).

Odometer

- This odometer shows the total kilometers this motor has been driven.

Turn Signal Indicator

- The left or right Indicator will be flashing according to the operated directions of turn signal light switch when it is turned on.

High Beam Indicator:

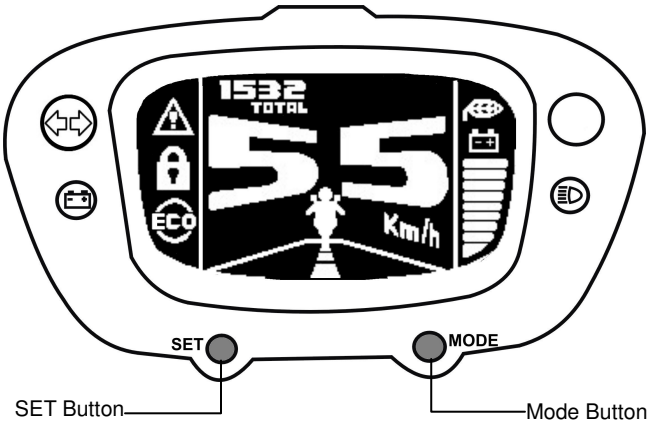
- This indicator comes on when the high beam headlight switch is turned on.

Charging Indicator

- When the battery is being charged, the charging indicator is on.

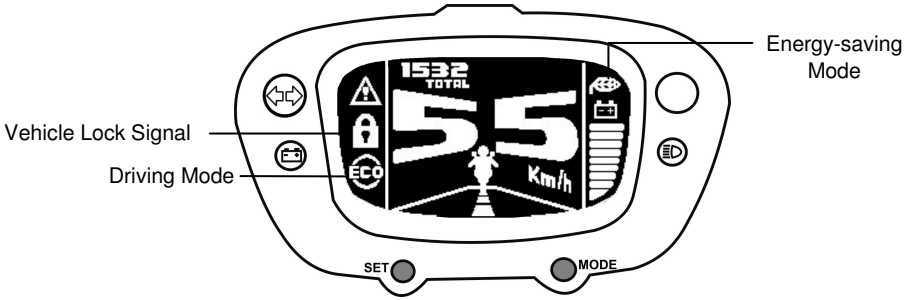
Battery Quantity Indicator

- When the main switch is turned to Ω with the battery quantity gauge pointing to "▮", the battery is fully charged ; when consuming the power, the battery quantity indicator will go down, each section indicates around 10% battery quantity.



Adjustment of SET / MODE Button

- When key switch is turned to "ON", Press "**MODE**" button to change between "TOTAL" and "TRIP" modes. Under TRIP mode, press "**SET**" button continuously to reset the TRIP kilometer readings.



Driving Mode

Pull the brake lever then press "MODE" ,vehicle lock signal "🔒" will go off, at the mean time you can switch: "GO" (normal mode), "ECO" (economic mode), "⛰" (hill-climbing mode).

"🔒" Vehicle Lock Signal

- When the main switch is turned to "◯" , pull the brake lever and press "MODE" , Vehicle Lock Signal will go off, then you can ride the scooter.

⚠CAUTION:

- After unlocking the vehicle, it will automatically transfer to lock condition if the vehicle is not operated (without turning throttle) in 5 minutes. It is needed to pull the brake lever and press "MODE" , to activate to vehicle again.
- In the situation of unlocking the vehicle while the main stand is applied, turn the throttle and the rear wheel go unloaded, the vehicle will go idling protection, and there will be no power output.
- If the side stand is applied, the vehicle lock signal will be on, and it is unable to activate the vehicle.

"GO" Normal Mode

- The scooter operates at its max efficiency. The max speed is around 50km/h on level road condition.

"ECO" Economic Mode

- The scooter operates at its most economic efficiency to carry out the best durability. The max speed is around 30km/h.

"⛰" Hill-climbing Mode

- Hill-climbing Mode will increase the motor torsion to enhance hill-climbing ability. After 30 seconds of applying this mode, the scooter will automatically transfer to normal mode.
- While used on flat road, the scooter will increase its motor torsion and increase its acceleration.

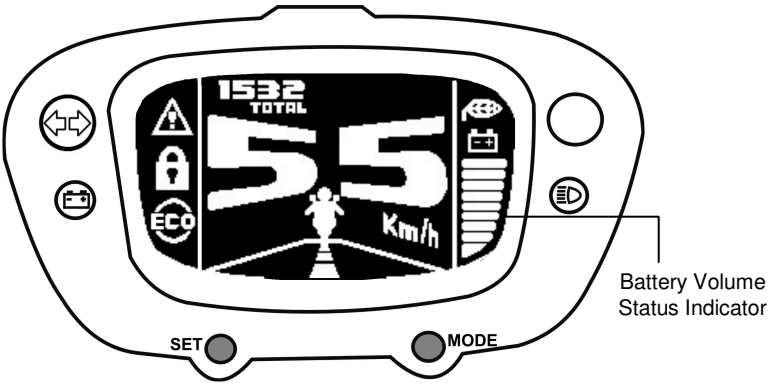
⚠CAUTION:

- If the hill-climbing mode is continuously used on flat road or gentle slope, the scooter will not transfer to normal mode and maintain at hill-climbing mode.
- While changing lanes or making a turn, do not switch the modes.

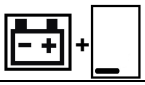
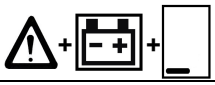
"🌿" Energy-saving Mode

- When riding on flat road condition, "🌿" indicates the scooter is operated at the most energy-saving state.

Battery Volume Status Indicator



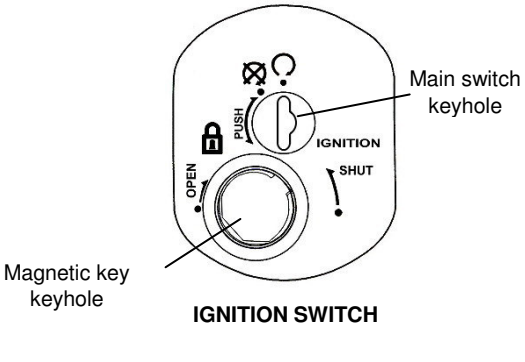
Turn the main switch to "ON"

Battery Volume Status	Remaining power	Condition
	90~100%	Shows the remaining power is full and at its best durability.
	40~50%	Show the remaining power is 40-50%. Avoid long distance riding.
	20~30%	Shows the remaining power is 1/3, and the system will be compelled to "ECO" economic mode; the max speed is 30km/h.
	**10%**	The two signals flash shows the remaining power is low, the durability is around 4km; please charge the battery immediately.
	**5%**	The three signals flash show the remaining power is extra low, the durability is around 2km; please charge the battery immediately.
Note: It is suggested that to charge the battery to its full capacity after each riding.		

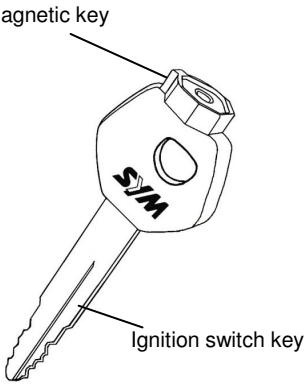
⚠CAUTION:

- When the battery volume indicator shows the remaining power less than 1/3, the system will be transferred to economic mode to keep the best durability and cannot be switched to other modes; at the mean time the top speed is less than 30km/h.

Operation of Main Switch



IGNITION SWITCH



MAGNETIC KEY :

- Align magnetic key and magnetic keyhole and turn right to open the main switch keyhole.
- Align magnetic key and magnetic keyhole and turn left to shut the main switch keyhole.

Main Switch

"**ON**" position

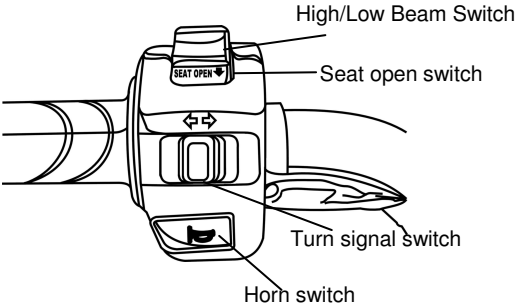
The motor is on in this position. After unlocking, the scooter is ready for use. The key cannot be removed.

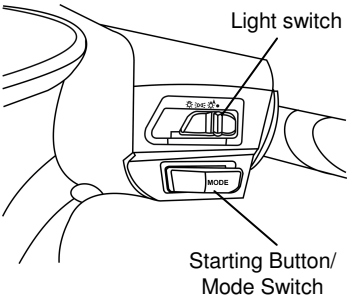
"**OFF**" position

The motor is off in this position. The key can be removed.

"steering handle lock" position

Turn the steering handle to left and press the key down and then lightly turn it to lock.
The key can be removed.
When unlocking. Simply turn the key from "lock" to "off."





Use of Buttons

Light Switches

When the switch is turned to this position, all lights will go off.

When the switch is turned to this position, headlight, position light, rear light, and panel light will automatically be on or off according to the environment.

When the switch is turned to this position, position light, rear light, and panel light will come on.

When the switch is turned to this position, headlight, position light, rear light, and panel light will come on.

Starting Button

MODE To activate the motor, press this button.

Turn the main switch to "○"position, pull brake lever after gauge checking system, then press this button to activate the motor.

Turn Light Switch

Turn the main switch to "○"position, turn the turn light switch, and the turn light will flash. When using turn light, the turn light signal will flash in accordance with the turn you make.

Horn Switch

Turn the main switch to "○"position, press this button, and the horn will sound.

Seat Lock

- **Unlocking method:** 1. Insert the key to the keyhole on left side panel, then turn the key right to open the seat.
  2. Press "SEAT OPEN" to open the seat.
- **Lock :** Press the saddle down and it will be locked automatically.

The Best Method to Start

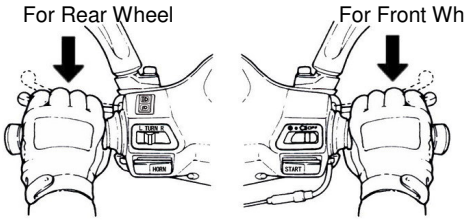
- Before start, you should turn on the turn signal, watch the rear side to make sure no vehicle is coming, and then you can start.

Braking

- Avoid unnecessary sudden braking.
- Use front and rear wheel brakes simultaneously when braking.
- Slow down and brake early when riding in rainy days on slippery roads. Never apply the brakes suddenly to prevent skidding and falling.
- Avoid brake continuously for a long period of time because that may overheat the brakes and reduce its braking efficiency.

⚠CAUTION:

- Using only the front brake or the rear brake increases the risk of falling because the scooter tends to pull to one side.
- When the front or rear brake is operated, speed controller will cut off the power. Be careful when riding the vehicle.



Parking / Shutting Off

1. Turn on the turn signal in advance to warn the vehicles behind. Decelerate and ride to the right side. Reverse the electric throttle and pull front and rear brake levers slowly.
2. Push back the turn signal switch and rotate the main switch key to "⊠" to cut motor power off.

⚠CAUTION:

- Do not rotate the main switch key when riding the vehicle to avoid an accident.
- To avoid children from injury and theft, lock the steering handle and removing the key after parking.

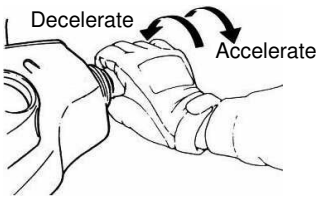
3. Park the vehicle on level ground with the main stand.
4. Lock the steering handlebar and remove the key after parking to avoid being stolen.

ELECTRIC THROTTLE INSTRUCTION

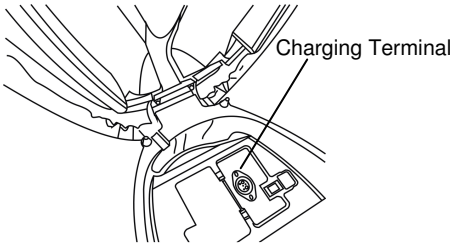
Accelerate : Increase riding speed.

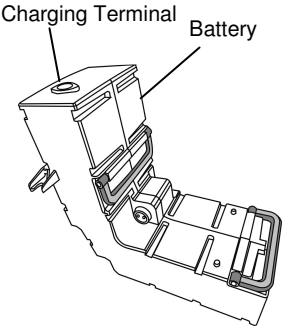
- If brake lever is pulled, the electric throttle will be cut off power.

Decelerate : Decrease riding speed.



BATTERY CHARGING INSTRUCTION





Steps for charging battery on vehicle:

1. Open the saddle
2. Insert the power cable of the charger to socket (100V-240V)
3. Connect output cable of the charger and the charging terminal of the vehicle
4. Turn the charger on to charge the battery

Steps for removing the charger:

Reverse the steps of charging.

⚠CAUTION:

- Power remaining more than 50%, continuous 14 days without operating, the battery will automatically be in hibernation mode.
- Power remaining 15%-50%, continuous 7 days without operating, the battery will automatically be in hibernation mode.
- Power remaining less than 15%, continuous 2 days without operating, the battery will automatically be in hibernation mode.
- If the battery is in hibernation mode, you have to charge and reactivate the battery before using.
- If the vehicle will not be operated for a long period of time, it is recommended to fully charge the battery to maintain the best efficiency and life service.

⚠WARNING:

- Please turn off the power and remove the key before charging to avoid children from injury.
- Do not remove the battery from the vehicle and then charge.
- Please charge the battery at a cool place. Keep the battery from high temperature, sun ray, heat, fire, and water.
- Please use SYM authorized charger for charging, or the battery may result in electrolyte leakage, heat, and explosion.

STEPS FOR CHARGING THE BATTERY

1. Turn off main switch	2. Keep charger switch on “OFF” position	3. Open luggage box

4. Open charging cover	5. Connect charging terminal (Note: Be aware the direction of the charging terminal)	6. Connect the charger to AC100V-240V

7.Turn the charger switch to “ON” position.	8.The charger will show orange light (charging) or green light (fully charged).	9.The gauge will show the battery power while charging.

Note: If the charger shows no light or flashes red light, please check the charging terminal and turn on the switch again. If the charger light still shows no light or flashes red light, please contact your SYM dealer.

INSTRUCTION OF BATTERY USAGE

Specification :

Type	Voltage (V)	Capacity (Ah)	Size			Weight (kg)
			Length (mm)	Width (mm)	Height (mm)	
Li(Ni Co Mn) O2	48	20	393	246	417	10.2

Usage Method :

- Turn off main switch before charging.
- Fully charge the battery before the first ride.
- Charge the battery after each ride.
- Charge at least once every 3 months, if the vehicle does not operate for a long period of time.
- Charge the battery on the vehicle. Do not remove the battery.

⚠CAUTION:

- Please use the SYM authorized battery. For the safety of electrical parts, do not use unauthorized battery.
- Keep the battery clean.
- Keep children away while charging.

⚠WARNING:

- When deformation, leakage or corrosion occurs to the battery case, stop using the battery immediately and contact your SYM dealer for help.
- Do not disassemble, restructure or destroy the battery.
- Do not dispose the battery or throw it into fire; recycle it at recycle plants or local dealers.

Factors that affect the life span of the battery :

(1) Over Discharge :

a. Not in use for long period of time without charging.
b. The battery is not recharged when it is empty.

(2) High-Rate Discharge :

a. Frequent riding at max. speed.
b. Frequent riding on the slope.
c. Frequent riding on the rugged road.
d. Over-loaded.

(3) Others :

a. Vehicle parts worn out.
b. Charger malfunction.

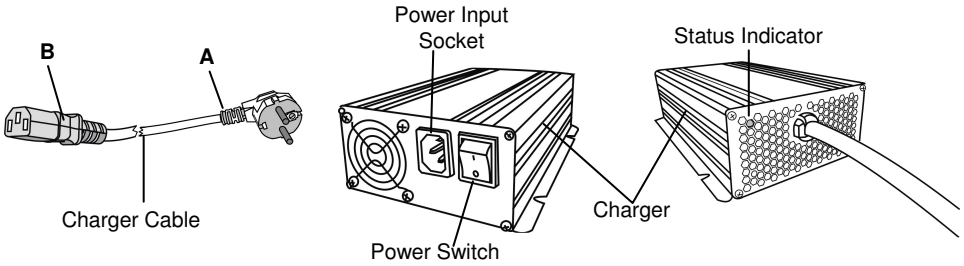
BATTERY CHARGER USAGE NOTES

Usage Method：

1. Insert the charger output plug into the charging terminal on the battery.
2. Connect charger cable plug “A” to AC power, and connect charger cable “B” to the charger.
3. Turn on charger power switch.
4. Check LED status indicator.
5. When the battery is fully charged, the green light is on.

⚠CAUTION:

- Make sure the power switch on “OFF” position while connecting and removing charger cable.
- Use the battery charger indoors; avoid hot, humid or dusty environment.



⚠WARNING:

- Prevent the charger from striking, pressing, and falling.
- Use the charger indoors. Do not place the charger in the luggage box to avoid shocking and moisture.
- Do not place the charger in the luggage box while charging to avoid heat.
- Keep children away while charging.
- Please park the vehicle along the wall or in the corner while charging to avoid tripping people.

LED Indicator

LED	Orange	Green	Red Flash	No Light
Mode	Charging	Fully Charged	Abnormal	Cable disconnect or power switch off

LED Red Flash**:**

Low input voltage, fan malfunction, over-heat protection, battery disconnection, battery low voltage, charger over voltage protection, overtime charging, battery malfunction

Troubleshooting

Detection Item	Possible causes	Countermeasures
Unable to charge	Charger power switch off	Turn power switch to “ON”
	Not using SYM authorized battery	Using SYM authorized battery
	Low input voltage	Power input 100V~240V
Long time charging without green light on	Battery deterioration or malfunction	Replace battery

If problems cannot be eliminated, please contact your SYM dealer.

CHARGER USAGE INSTRUCTION

Specification:

Model	Input Voltage	Output Voltage	Charging Time	Battery Type
48V 10A	100~240 VAC	48 VDC	2~3 hour	LiFe Battery (20Ah)

Charger Usage Instruction:

- Keep power switch on “OFF” position before charging
- Connect charger output cable and battery first, then connect power cable and 100V-240V socket. Orange light shows the battery is being charged; green light means charging finished, the battery is fully charged, please stop charging.
- Please use SYM authorized charger.

⚠CAUTION:

- While connecting or removing cables, please make sure the power switch on “OFF” position.
- Please charge the battery indoors, avoid sun ray, moisture, and dust.
- Prevent rain, liquid, foreign metal material from falling into the charger to avoid short circuit or burnout.
- After charging, please remove the cables from the socket to avoid power consuming.
- Do not charge battery of other form and brand with the charger to ensure the life span and safety of the charger and battery.

⚠CAUTION:

- The AC pug is 3P mode; do not modify it to 2P mode to prevent electric shock.
- In normal temperature, the battery can be fully charged in 2-3 hours; however, if the ambient temperature or battery temperature is too high (over 55℃) or too low (under 0℃), to prevent deterioration, the charger will prolong the charging time to 4-5 hours.
- When the charger indicator light does not come on, red light flashes, or the battery cannot be fully charger, please shut off the charger for 5 seconds, then turn on the charger again to correct the situation. If this situation still cannot be solved, please contact your SYM dealer.

⚠WARNING:

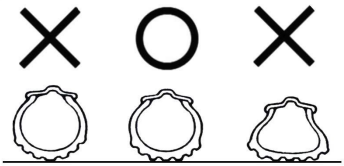
- Use independent socket for the charger, do not share the socket with electric equipment to avoid danger and fire.
- When charging, the fan will make louder noise, which is a normal phenomenon.
- Do not disassemble or strike the charger. Warranty will not be applicable if consumers disassemble the charger or there is obvious damage on the charger.

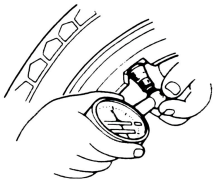
TIRE INSPECTION

- Tires should be checked and inflated when the engine is off.
- If a tire's ground contacting curve is abnormal, check it with a tire pressure gauge and inflate it to the specified pressure.
- Tire pressure must be checked with a tire pressure gauge when the tire is cold.

⚠CAUTION:

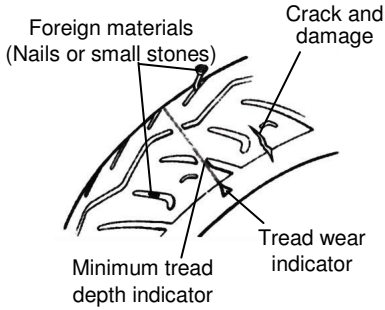
- If the tire pressure is insufficient, it will affect the riding range of the vehicle and the life span of the battery and motor. Tire pressure inspection is suggested every month.





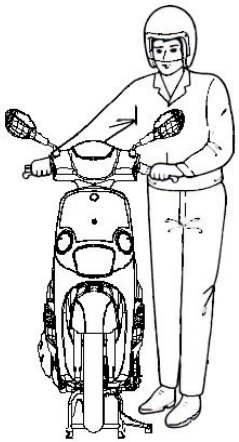
PLEASE REFER TO SPECIFICATIONS FOR STANDARD TIRE PRESSURE

- Visual check tires for frontal and lateral side walls for crack or damage.
- Visual check tires for any nails or small stones wedged in the tread.
- Check the "tread wear indicator" condition to see if tread groove depth is insufficient.
- A tire with a wear bar showing is worn out and should be replaced immediately.



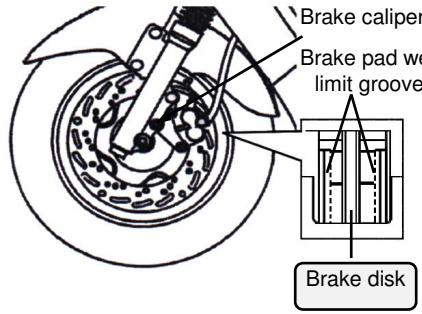
STEERING HANDLEBAR INSPECTION

- Switch off the power and remove the key before inspecting.
- Visual check the front shock absorbers for any damage.
- Operate the steering handlebar up and down, and check the front shock absorbers for noises due to bends.
- Check the bolts and nuts of front shock absorbers with wrenches for tightness.
- Shake the steering handlebar up & down, left & right, and front & rear to check if it is loosen or pulled to one side.
- Check the steering handlebar if it is pulled too tight by the brake cables.
- Take your vehicle to SYM Authorized Dealer for a check or adjustment if abnormal conditions are found.



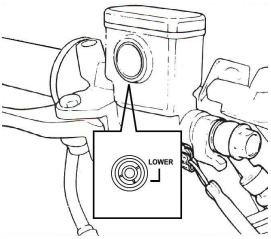
Checking front brake lining

- Check the brake from behind the brake caliper. The brake pad must be replaced with new lining when the brake pad wear limit reaches the brake disk.



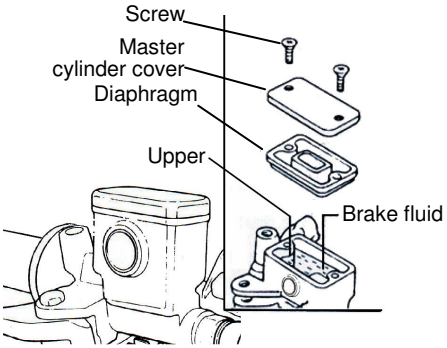
Checking oil quantity in brake oil reservoir

- Park the scooter on a level ground, and check if fluid level is under the “LOWER” mark. Recommended Brake Fluid: WELL RUN BRAKE OIL (DOT 3).



Replenishment of front wheel brake fluid

1. Loosen the screws and remove the master cylinder cover.
2. Wipe clean foreign materials, dirt around the reservoir, be careful not to let foreign materials fall into the reservoir.
3. Remove the diaphragm plate and the diaphragm.
4. Add brake fluid to upper level.
5. Install the diaphragm plate and the diaphragm, and install the master cylinder cover.
6. Please note the diaphragm direction, and do not let foreign materials fall into the reservoir. And tighten the master cylinder cover securely.



⚠CAUTION:

- To prevent chemical reaction, please do not use brake fluids other than those recommended.
- Do not fill above the upper limit when adding brake fluid and avoid dropping on painting or plastic components to prevent damage.

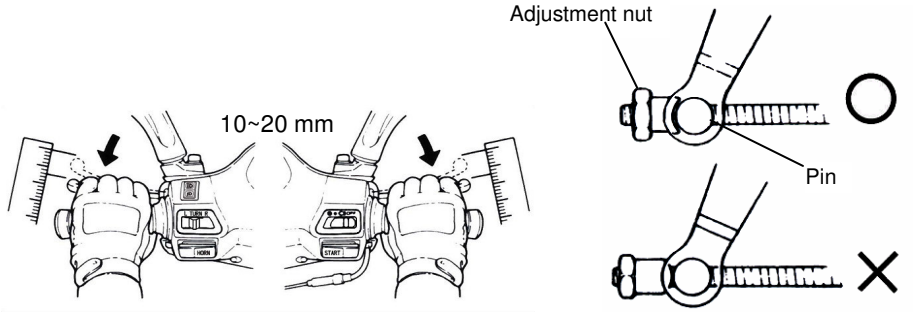
INSPECTION AND ADJUSTMENT OF BRAKE FREE PLAY

INSPECTION : (Brake lever free play must be checked with the engine off.)

- Brake lever free play for front and rear wheels.
  When checking the hand-braking lever for front and rear wheels, its free play (the stroke of hand-braking lever from no braking to initial braking) should be 10~20mm. It is abnormal if the feel is spongy when holding the hand-braking lever forcefully.

Adjustment : (Drum type)

The indentation of brake adjustment nut must be aligned with the pin. (see below figure)

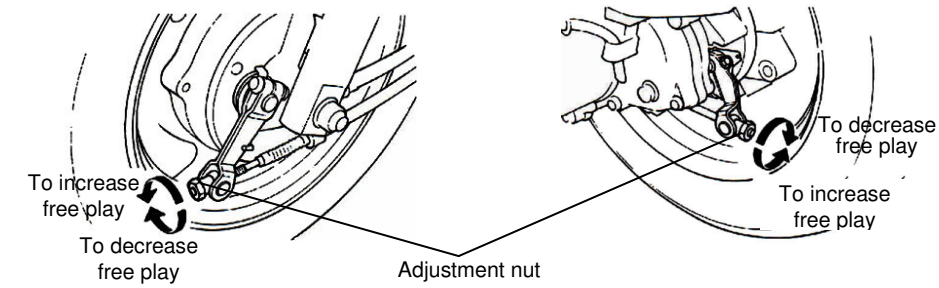


⚠CAUTION :

When free play is between 10~20 mm, check brake indicators of front and rear wheels. If the arrow on the brake arm aligned with the "△" marked on the brake disk, that means the brake lining has been excessively worn, and must be replaced immediately.

Turn the adjustment nut on brake arm of front and rear wheels to adjust the free play of hand-brake lever.

- Hold the hand-brake levers after adjusting with both hands until there is effective brake feeling.
- Measure the free play with a ruler.

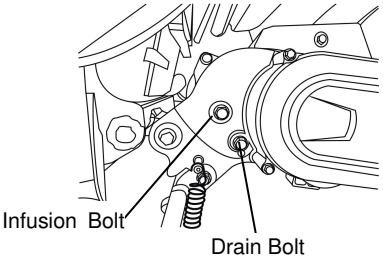


Front wheel drum type

Rear wheel drum type

TRANSMISSION OIL REPLACEMENT

- Park the vehicle on level ground, remove infusion and drain bolts, drain out the transmission oil.
- Install the drain bolt and tighten it. Fill new 100 c.c. transmission oil; install and tighten the infusion bolt. Make sure bolts are tightened and check for leakage.
- Recommend Oil: Genuine SYM HYPOID GEAR OIL(SAE 10W-40)
- Replace transmission oil on the first 300km, then replace it every 4 months or 2000km.



MAINTENANCE

1. Routine Maintenance

- Turn off the main switch and remove the key before performing inspection and maintenance.
- Clean the dust and mud around the motor and every part of the vehicle periodically.
- Check if the brake, light and tire operate normally.
- Check if the screws or bolts are loose; adjust them properly.

⚠CAUTION:

- Do not spray the vehicle body and motor with high pressure water to avoid affecting the performance and life span of the vehicle.
- Use neutral cleanser and soft cloth to wash and wipe the vehicle.

2. Periodical Maintenance

- Periodical inspection and maintenance at SYM dealer every month is suggested to lengthen the life span and riding safety of the vehicle.

INSTRUCTION OF MOTOR USAGE

Specification :

Model	Type	Voltage	Max Power
ED1LU	DC Brushless Hub Motor	48 VDC	2200 W

⚠Caution
- Please avoid overload, steep slope, and long period of power-consuming condition; it may damage battery, motor controller, and motor.
- Do not spray high pressure water toward motor assembly.
- Do not ride across the flooded road over 10cm high.
- Do not disassemble the motor assembly.

CONTROLLER USAGE INSTRUCTION

Specification:

Model	Voltage	Max Power
ED1LU	48 VDC	60 A

Usage Method :
- Avoid rotating the electric throttle rapidly; high current operation may lead to high temperature of the motor controller.

Function :
- Controlling the current intensity, braking cutoff protection, malfunction cutoff protection, rotation-clogging protection and over-heating protection.

⚠CAUTION:
- Avoid long time solarization, rain to secure the controller.
- Do not disassemble the controller.

Troubleshooting

	Detection Item	Possible Causes	Countermeasures
1.	Meter doesn't work and indicator doesn't illuminate.	Power cable of battery is not connected.	Reconnect the power cable and then switch on.
		Battery inner cable loose	Reconnect the inner cable and then switch on.
		Main switch coupler loose	If the coupler is loose, reconnect it. If the coupler is ok, there might be open circuit in the wire harness. Please contact your SYM dealer.
		Main switch malfunction	Replace the main switch
		Low battery voltage	1 Recharge the battery. Check if the battery voltage is 52V. 2. Replace the battery when the voltage is under 30V after recharging.
2.	Malfunction of light system	DC / DC Converter malfunction	1. Replace DC/DC Converter. 2. Replace fuses (5A / 15A). 3.Contact your SYM dealer.
3.	Rear wheel does not rotate when the electric throttle is rotated.	Faulty main switch	Replace the main switch
		Motor wire loose	Reinstall
		Ineffective motor position feedback signal	Contact your SYM dealer
		Motor malfunction	
		Motor controller overheated	
		Motor controller malfunction	
4.	Unable to charge the battery (orange light means charging)	Charger coupler is not plugged properly.	Re-plug coupler.
		Charger malfunction	Replace the charger.
5.	Riding mileage is too short.	Front / rear brake too tight	Adjust front / rear brake.
		Long time without charging	Recharge after riding or when the vehicle is not in use for a long time.
		Low temperature	Battery quantity will decrease when the temperature is low.
		Low tire pressure	Check the tire pressure periodically (every month) and inflate the tire to the recommended pressure.
		Aged battery	Replace the battery

Item	Model / Specification	e-Virid			
		ED1LU1-6	ED1LU2-6	ED1LU3-6	ED1LU1-F
length/width/ Height (mm)		1,725 / 625 / 1,060			
Net Weight/Wheel base (mm)		81Kg / 1,215			
Seat Height (mm)		745			
Motor	Type	DC Brushless Hub Motor			
	Rated Power (W)	1800 W			
	Max. Power (W)	2200W			
Motor Controller	voltage	48 VDC			
	Output Max Current	60 A			
Battery	Type	Li(Ni Co Mn) O2			
	voltage	48 V			
	Capacity (Ah)	20 Ah			
	Quantity	1			
Charger	Type	48V 10A			
	Input voltage	100~240 V			
	Output voltage	53.3 VDC			
Max. Speed (km/hr)		45		25	45
Climbing Ability		13° (23%)以上			
Front light bulb(high, low)		12V 35W / 35W×1			
Front Position Lamp		12V 5W×1			
Taillight / Stoplight		LED	12V 5W / 21W	LED	
Turn signal light bulb		LED	16W×2 10W×2	LED	
Fuse		5A×1			
Front brake		Disk type (ø160mm)	Drum type (ø110mm)	Disk type (ø160mm)	
Rear brake		Drum type (ø110mm)			
Front tire		3.00-10 42J			
Rear tire		3.00-10 42J			
Tire pressure		Front: Standard 1.8kg/cm^2, Rear: Standard 2.0 kg/cm^2 for 1 person,2.3 kg/cm^2 for 2 person			
Transmission oil capacity		110 cc. (100 cc. for change) SAE 10W-40			

※Note：Max. speed and riding mileage change according to the traffic conditions, rider's weight, riding habits and motor / battery conditions.

1. How is the SYM electric scooter capability of riding across flooded road? Is the motor waterproof?
   A: The motor is capable of being drenched, but the waterproof capability is not good when being soaked. Do not ride across the flooded road when the water level is higher than the wheel rim (approximately 10cm high).

2. Can SYM electric scooter be ridden in the rainy day? How is the waterproof capability?
   A：Yes, but do not ride across the flooded road when the water level is higher than the wheel rim (approximately 10cm high), or the motor could possibly suffer from being soaked (the waterproof capability of motor depends on the gasket adhesive; the waterproof capability can not be guaranteed after disassembly). Spraying on the motor and wire harness with high-pressure water is extremely prohibited, which will result in short circuit.

3. What will happen to the battery and motor if the vehicle is soaked in the water with the water level higher than the footrest when the main switch is key-off? What will happen if the water level is higher than the footrest when the main switch is key-on?
   A：The motor, motor controller and DC-to-DC converter could be possibly damaged because of being soaked when the water level is higher than the footrest. The damage would be worse if the main switch is key-on. Only the battery could possibly survive damage, but might malfunction because of short circuit caused by other parts' damage.

4. Can SYM electric scooter carry passenger or cargo?
   A：This vehicle can carry a passenger, but it is not recommended to carry cargo. Max passenger load: 150KG. Load increase will affect vehicle durability.

5. Battery charger input voltage ?
   A：Use the electrical socket (100V~240V)

6. How long is the charging period?
   A：1. The battery needs to be charged 2-3 hours (20Ah)，The battery has no memory effect and could be recharged overnight, In the situation that the ambient temperature or the battery temperature too high (more than 55℃) or too low (less than 0℃), to avoid battery deterioration, the battery will automatically prolong the charging time to 4-5 hours.
   2. It is recommended to recharge after each ride to prolong battery service life.
   3. In long time not in use, it is recommended to fully charge the battery every 3 months to prolong battery service life.

7. Is there any side effect when the charger is still plugged to the electrical socket after the battery is removed?
   A: The charger will not be heated when it is plugged to the electrical socket, but would consume standby power.

8. How much will the riding range decrease when the headlight is turned on?
   A: Approximately 10~20% less.